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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,997	03/01/2002	Christopher Rutledge	12349/1	1126
2292	7590	11/29/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			SEDIGHIAN, REZA	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	
			2633	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,997

Applicant(s)

RUTLEDGE ET AL.

Examiner

M. R. Sedighian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-30 is/are allowed.
- 6) ☒ Claim(s) 31-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. This communication is responsive to applicant's 9/6/05 amendments and remarks. The amendments have been entered. Claims 1-37 are now pending.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 31-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 31, it is not clear what is meant by "... where the grouped output signals each include at least one or more output signal than splitted input signal...". Figures 2-4 each show a plurality of output signals from splitters 206 to optical switch 201, and output signals from switch 201 to combiners 208. Specification describes (Page 8, paragraph 00033) there is a unique correspondence between the number of outputs from each splitter 206, input to optical switch 201, and the number of input signals fed into each combiner 208. Specification further describes (Pages 8-9, paragraph 00033) the presence of control channel generates an additional input signal such that there is one or more input signal (control channel signal 205) into each combiner 208 than output signals from each splitter 206 that are fed into switch 201. Which grouped output signals each include one or more output signal than the splitted input signal???

As to claim 34, it is not clear what is meant by "... the broadcast communication services are switched at a pre-determined time from use by the broadcast communication services users to said pre-determined group of users".

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. (US Patent No: 6,895,185).

Regarding claim 34, Chung teaches a method of providing dynamic bandwidth control to a broadcast optical communication network (col. 1, lines 5-10, col. 2, lines 14-17 and fig. 2), comprising: receiving an optical communication signal carrying broadcast communication services for users (col. 11, lines 35-40, lines 62-67); and scheduling a portion of the broadcast communication services to be delivered as separate, targeted communication services to a pre-determined group of users (col. 10, lines 59-63 and col. 12, lines 34-41), where the wavelengths (col. 18, lines 36-45) representing the delivered portion of the broadcast communication services are switched (col. 10, lines 59-63). Chung differs from the claimed invention in that Chung does not specifically disclose the broadcast communication services are switched at a pre-determined time. Chung teaches a central office/headend that performs switching of the signals in order to split signal to each subscriber or send the signal transmitted by each subscriber to other places but also splitting of broadcasted signal (col. 10, lines 59-63). It would have been obvious that switching is performed in a pre-determined time such that the signal can be further transmitted to subscribers. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention that an optical broadcast communication system such as the one of Chung can

switch the signals in a pre-determined time to further transmit and split the signal to different subscribers.

6. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imoto (US Patent No: 4,801,190).

Regarding claim 34, Imoto teaches a method of providing dynamic bandwidth control to a broadcast optical communication network (col. 1, lines 5-10 and fig. 2), comprising: receiving an optical communication signal (col. 4, lines 20-25 and 3, 4-2, fig. 2) carrying broadcast communication services (col. 1, lines 22-25) for users (7-1, 7-2, 7-3, 7-4, fig. 2); and scheduling a portion (4-2, fig. 2) of the broadcast communication services to be delivered as separate, targeted communication services to a pre-determined group of users (col. 4, line 30), where the wavelengths (col. 4, lines 20-21) representing the delivered portion of the broadcast communication services are switched (col. 4, lines 25-27 and 9-2, fig. 2). Imoto differs from the claimed invention in that Imoto does not specifically disclose the broadcast communication services are switched at a pre-determined time. However, Imoto teaches a wavelength selecting switch is used on the receiving side to selectively receive signals of desired wavelength, thereby preventing signal interference between subscribers (col. 3, lines 13-16). Accordingly, switch of Imoto switches at a pre-determined time to further prevent signal interference. Therefore, it would have been obvious to an artisan at the time of invention that an optical broadcast communication system such as the one of Imoto can switch the signals in a pre-determined time to prevent signal interference between a plurality of different subscribers.

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Regarding claim 35, Imoto teaches the targeted communication services share at least one common wavelength with the broadcast communication services (col. 1, lines 27-38).

Regarding claim 36, Imoto teaches scheduling occurs at a pre-determined periodic time of the day (col. 2, lines 22-28).

Regarding claim 37, Imoto teaches the users of the broadcast communication services are business users (for example, TV sets 7-1, telephone 7-3, and facsimile 7-4, that can be located in a business center) and the users of the targeted communication services are residential users (col. 1, lines 6-9, col. 3, lines 24-25, col. 4, lines 20-21).

7. Applicant's arguments with respect to claims 1, 14, 15, 31, and 34 have been considered but are moot in view of the new ground(s) of rejection.

8. Claims 1-30 are allowed over prior art of record.

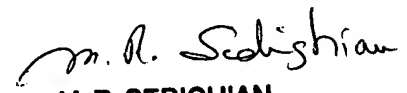
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034.

The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
M. R. SEDIGHIAN  
PRIMARY EXAMINER